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local insights

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An economic and labor market analysis of the Uintah Basin Area

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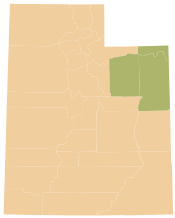
in this issue

An Analysis of the Uintah Basin's Labor Force



BY ERIC MARTINSON, ECONOMIST

With what is likely the majority of Americans eying the movements in the economy during what has been characterized as a sluggish recovery, scrupulous attention is being paid to the unemployment rate, released monthly both nationally and locally. This mighty statistic that measures, well, unemployment is one of the most important metrics of economic health within a given population. The process behind generating an unemployment statistic serves as a basis of great discussion regarding the characteristics of the labor force.

An important component of national and local unemployment rates is labor force participation. Indeed, it is understandable that many easily equate the actual level of employment as the main or only determinant of unemployment statistics. However, the fact that most unemployment rates across the nation remain higher than pre-recession rates has us fretting about the state of the economy and how long it will take to return to a "desirable" locus. The level of employment is always held relative to changes in the actual size of the labor force over time; the supply of labor (the labor force) can and does drive an unemployment rate up or down. In fact, it seems the size of the labor force is often an afterthought in peoples' minds when trying to make relative sense of the unemployment rate, be it locally or nationally. The important point is that a declining unemployment rate will not always mean that more jobs are being added to the economy. Conversely, people returning to the labor force (or entering it for the first time) may, in theory, even temporarily drive unemployment rates up.

For example, Figure 1 illustrates how movements in the level of employment as well as movements in the level of the overall labor force affect the rate of unemployment. As the time series shows, the level of national employment has moved more or less in sync with the total supply of labor until the Great Recession hit in late 2007. The shaded area between these curves represents the number of unemployed. Not only did a severe decrease in employment drive unemployment up, but the supply of labor stopped increasing and even dropped in 2008 and 2009 and has yet to return to its 1991–2007 average growth rate.

Figure 2 more or less mirrors that of Figure 1; it is the same view into the labor force components for the Uintah Basin region. Here we see that the level of employment moves essentially in tandem with the overall supply of labor throughout the nineties and up to 2006. During this period, unemployment (shaded area between the curves) remains relatively steady, with the exception of the period between 2000 and 2002, where unemployment thins to a narrower margin. This narrowing takes place again from 2005 until the Great

An Analysis of the Uintah Basin's Labor Force (continued)

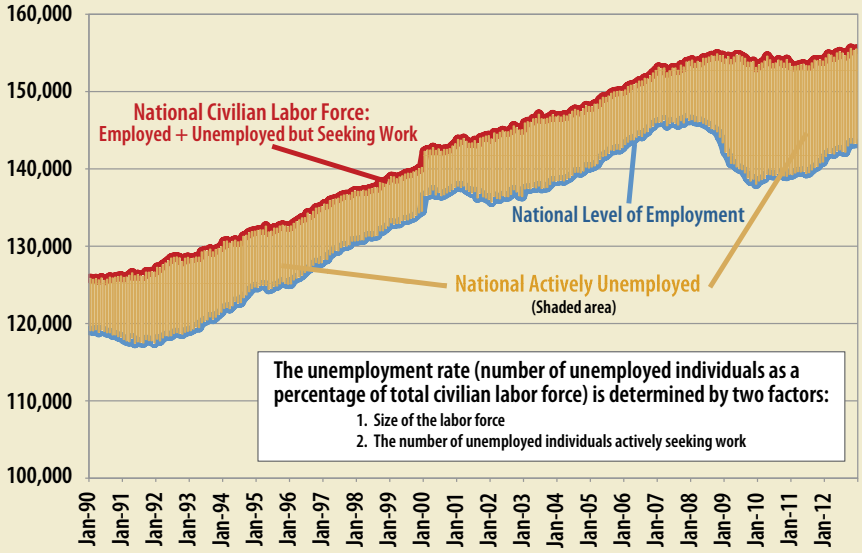
Recession hits the Uintah Basin in late 2008. Similar to the national picture, the recession brings with it decreased levels of employment as well as a 13.6 percent drop in the size of the labor force in the Uintah Basin. Since early 2010, changes in both the labor force size as well as the level of employment reversed their downward trend. In fact, as of December 2012, the labor force grew by 8.1 percentage points since its recession low in early 2010. Fueled by the oil and gas industries of Duchesne and Uintah counties, this recovery, by any standard, is proving quite impressive. What is not provided in either of these time series, however, is how closely the size of the labor force moves with trends in the working-age population.

Labor Force Relative to Civilian Population

The labor force participation rate provides even more context for the characteristics of the labor supply. Because the size of the labor force is directly dependent on population growth and other demographic indicators, such as inward/outward migration, holding the supply of labor relative to the entire population of those 16 and older provides important perspective when peering into the structure and trends of national, regional or local labor forces.

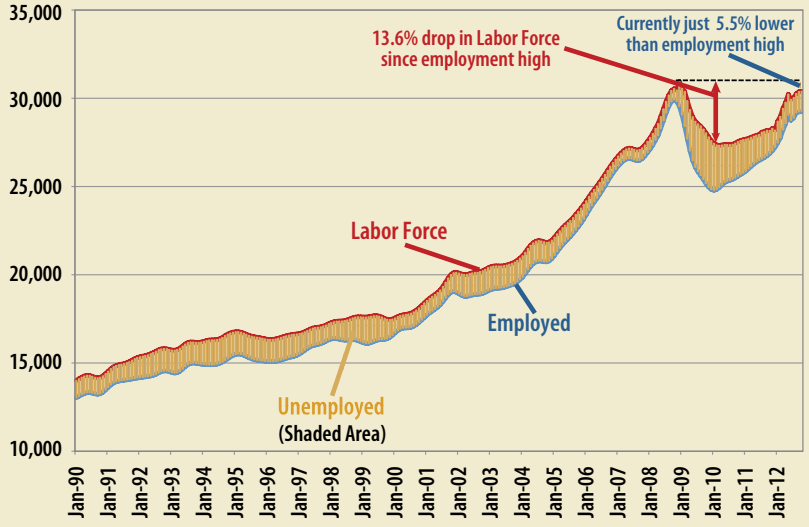
Figure 3 shows annual labor force participation rates for the country, the state and for the Uintah Basin. The trends at the national and state level show a steadily declining momentum over the last two decades. Many economists consider the declining national labor force participation rates to be structural, i.e., that shifts in the

Figure 1: Components of the National Labor Force, 1990–2012
(in thousands)



Source: U.S. Bureau of Labor Statistics

Figure 2: Uintah Basin Labor Force Growth Over Time



Source: Department of Workforce Services; Local Area Unemployment Statistics

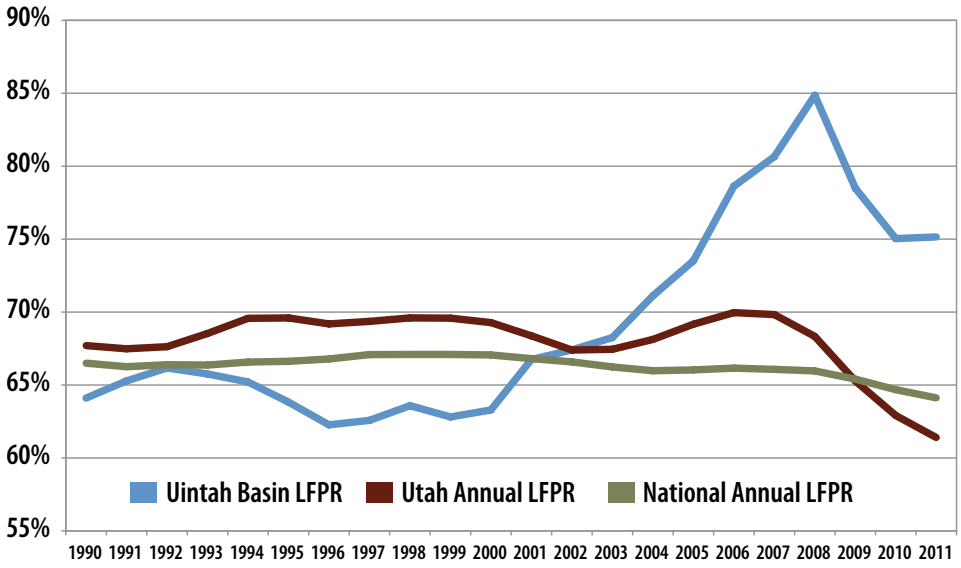
composition of the labor force as well as shifts in the attitudes and values of society are the culprits behind this steady decrease in labor force participation. In the state of Utah, the general trend of the labor force participation rate has typically followed that of the national rate (although the last bubble in Utah's trend appears to be cyclical). This suggests the possibility that the declining trend in Utah's labor force participation may also be structural. While this may or may not be the case, it can be seen that the labor force participation rate for the Uintah Basin, on the other hand, rapidly increased from 2000 to 2008. Despite the subsequent decrease in the Basin's labor force participation, it still remains significantly higher than in most of the past two decades, at 75 percent.

Changes in the Dynamics of the Labor Force

Comparing workforce participation with the entire civilian population 16 and older sheds light on the trends and cycles over time of the entire labor supply. But what exactly is driving these trends? In general, across the country and throughout the state of Utah, the landscape of the labor force has gone through some significant changes. This is also the case for the Uintah Basin. At the national level, the United States saw more and more women throughout the seventies and eighties entering the labor force. This phenomenon occurred in virtually every corner of the country as the culture and values of America shifted from the traditional system to a more progressive labor economy. This was certainly the case in Utah's Uintah Basin region.

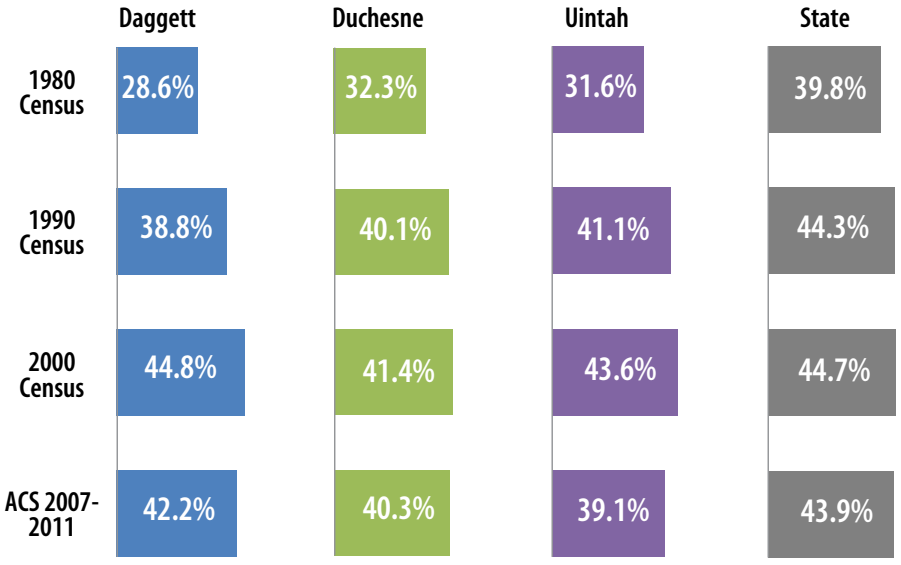
According to the 1980 U.S. Census, 28.6 percent of Daggett County's labor force was female; in Duchesne County, 32.3 percent were female and 31.6 percent were female in Uintah County (Figure 4). Compare these with a 39.8 percent female labor force for the state of Utah in 1980. It stands to reason that rural areas were slower to experience the entry of more women to the workforce. However, by 2000, greater

Figure 3: Annual Labor Force Participation Rates, 1990–2011



Source: Local Area Unemployment Statistics; National Cancer Institute: Surveillance Epidemiology and End Results (SEER)

Figure 4: Females as a Percentage of the Labor Force



Source: U.S. Census Bureau

An Analysis of the Uintah Basin's Labor Force (continued)

proportions of women entered the labor force in all of these counties: Daggett County's labor force was 44.8 percent women (an increase of 16.2 percentage points), Duchesne County 41.4 percent (an increase of 9.2 percentage points) and Uintah County 43.6 percent (an increase of 12.0 percentage points). Women in the state of Utah's labor force grew 5.0 percentage points between 1980 and 2000, to 43.9 percent female. Interestingly, from 2000 to the current period of U.S. Census data (2007–2011 ACS), the share of females in the work force actually decreases slightly in Daggett, Duchesne and Uintah counties as well as at the state level.

Another important dynamic to consider is age. On a general level, the past decade has seen a shift in participation rates among the youngest workers (16–24-year-olds) as well as the oldest workers (65–69-year-olds). More specifically, this general national trend shows that the labor force participation rates among 16–24-year-olds are declining. Conversely, participation rates among those hitting retirement are increasing, despite (and in many cases because of) the recent recession. To what extent may this be the case for the Uintah Basin?

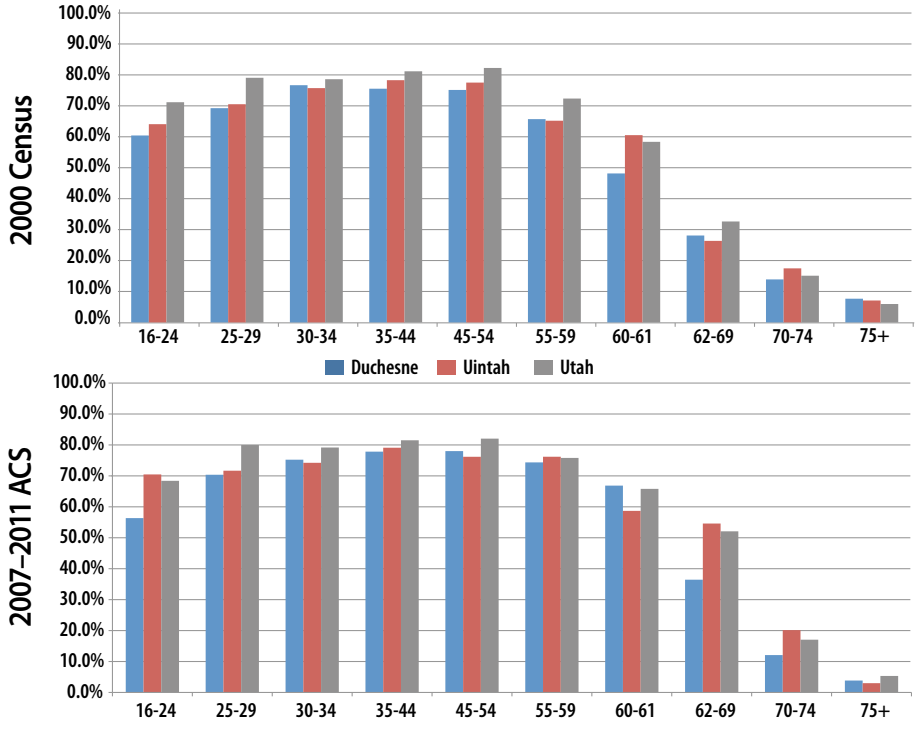
The 16–24-year-old age group shows a decrease in labor force participation in Duchesne County. According to the 2000 Census, 60 percent among these ages were in the civilian labor force. In the most recent ACS reporting period, that participation rate dropped to 56 percent, a drop of 4 percentage points. The story, however, is different for Uintah County, where participation among 16- to 24-year-olds actually increased by 7 percentage-points, from 64 percent in 2000 to 71 percent in the current ACS report.

Opposite to the decrease in the participation rate in Duchesne County among its youngest workers, the participation rate among those hitting retirement (62–69) actually increased by 8 percentage points, from 28 percent in 2000 to 36 percent in the current ACS report. This trend among retirement-age workers was shared among Uintah County residents as well. Older workers (62- to 69-years-old) increased their participation rate significantly from 2000 to 2011 by 29 percentage points, from 26 percent to 55 percent, a change quite visible in Figure 5.

As with labor force participation rates among females in the Uintah Basin, it would be reasonable to conclude that the increase in labor force participation among young workers in Uintah County is due to the cyclical nature of the oil and gas boom, an industry not restricted to older workers. It is reasonable to conclude that future reporting will likely demonstrate a reverse of the decline in participation among Duchesne County's youngest workers.

The story of the Uintah Basin's labor force demonstrates a higher female proportion in recent decades. It also tells of an older age group currently less willing to leave the workforce compared to previous times. Fortunately, this reluctance among older workers to leave the labor force does not seem to adversely affect the labor force participation among the Uintah Basin's youngest workers in the midst of an oil and gas boom.

Figure 5: Uintah Basin Labor Force Participation by Age



Source: U.S. Census Bureau

Economic Analysis:

Strong Transportation Industry Driven By Oil and Gas

BY ERIC MARTINSON, ECONOMIST

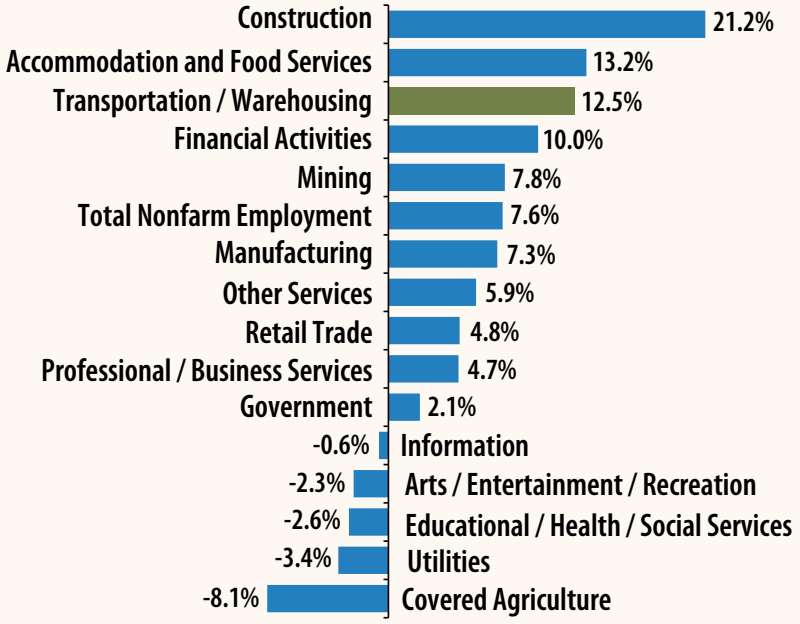
On June 29, 1956, President Dwight D. Eisenhower enacted the Federal-Aid Highway Act of 1956. Although this was not the first move by an administration to subsidize the building of national highways, it was the most progressive to date, and every single American today benefits in one way or another from this public good. It is a key component to virtually every industry within both the goods and services sector as well as national, state and local governments.

The interstate system is of vital importance to the Uintah Basin for any number of economic reasons, but most particularly because of one of its most important industries: oil and gas. Whether it is to ship propane and ethylene products for commercial and residential consumption or waxy crude to be processed in the North Salt Lake refineries, the Basin's oil and gas industry is heavily reliant on the network of roadways that connects the rest of the state and country with the goods produced in the Uintah Basin Region.

Certainly, the transportation of wholesale and retail items also hinges on the interconnectedness of the highway system. The Basin's fifth-most important industry in terms of employment is transportation and warehousing.

The transportation and warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage of goods, and support activities for the transportation industry. For the Uintah Basin, the vast majority of transportation and warehousing jobs are in heavy-truck-driving occupations.

Figure 6: Uintah Basin Percent Change in Nonfarm Jobs by Industry
September 2011 to September 2012



Source: Department of Workforce Services

In terms of employment, transportation and warehousing is one of the most important in the Uintah Basin. In September 2012, the 12-month average number of jobs that the trucking industry accounts for was 1,742, or 9.2 percent of all private employment in the tri-county area. The third quarter 2012 year-over-year growth in transportation and warehousing employment was 12.5 percent (Figure 6). Twelve months before, in September 2011, it had grown 13 percent year-over-year. This growth is spectacular by any measurement and a deeper look into the economic activities within the Uintah Basin should explain the reasons behind the double-digit growth in employment for the transportation and warehousing sector.

Transportation was ranked third in terms of year-over employment growth. In the third quarter of 2012, industries that grew faster than the transportation/ warehousing industry were construction and accommodation and food services. Each one of these other dynamic industries of the region is heavily reliant on a supply chain system, the driving force behind these supply chains, of course, being the trucking industry. In fact, a look at employment levels over time within the

Economic Analysis (continued)

mining and transportation/warehousing sectors reveals a relatively high level of correlation between staffing within the two industries (Figure 7).

The transportation/warehousing industry has grown steadily over the past decade. As a percentage of total nonfarm employment in the Uintah Basin, transportation has doubled in size in terms of employment. Just 5.2 percent of total employment in 2000, the transportation sector now accounts for 10.2 percent of all non-farm employment in the Uintah basin. The share of employment is even higher in Duchesne County, where transportation represents 14 percent of total non-farm employment during the previous 12-month period.

A recent task force attended by several major businesses in the Uintah Basin expressed a need for more qualified drivers, ranging from local to long-distance trucking, and from heavy, industrial, commercial shipping to water truck transportation throughout the oil and gas fields. The majority of these types of drivers require some sort of certification and licensing, usually the Commercial Driver's License (CDL).

According to the Utah Department of Workforce Services' Utah Occupational Report for heavy and tractor-trailer truck drivers, "this occupation is expected to experience faster than average employment growth with a high volume of annual job openings. Business expansion, as opposed to the need for replacements, will provide the majority of job openings in the coming decade. Job prospects for heavy and tractor-trailer truck drivers are expected to be favorable. Due to the somewhat difficult lifestyle and time spent away from home, many companies have trouble finding qualified long-haul drivers. Those who have the necessary experience and other qualifications should be able to find jobs." This is an occupation that has a good employment outlook and relatively high wages.

The Uintah Basin Applied Technology College delivered a report citing that the total placement rates for CDL-certified students for the 2012 fiscal year was 100 percent for the Roosevelt campus and 100 percent for the Vernal campus. These placement rates underscore the need that was expressed at the task force for more certified drivers and the overall projection for the trucking occupational outlook provided above.

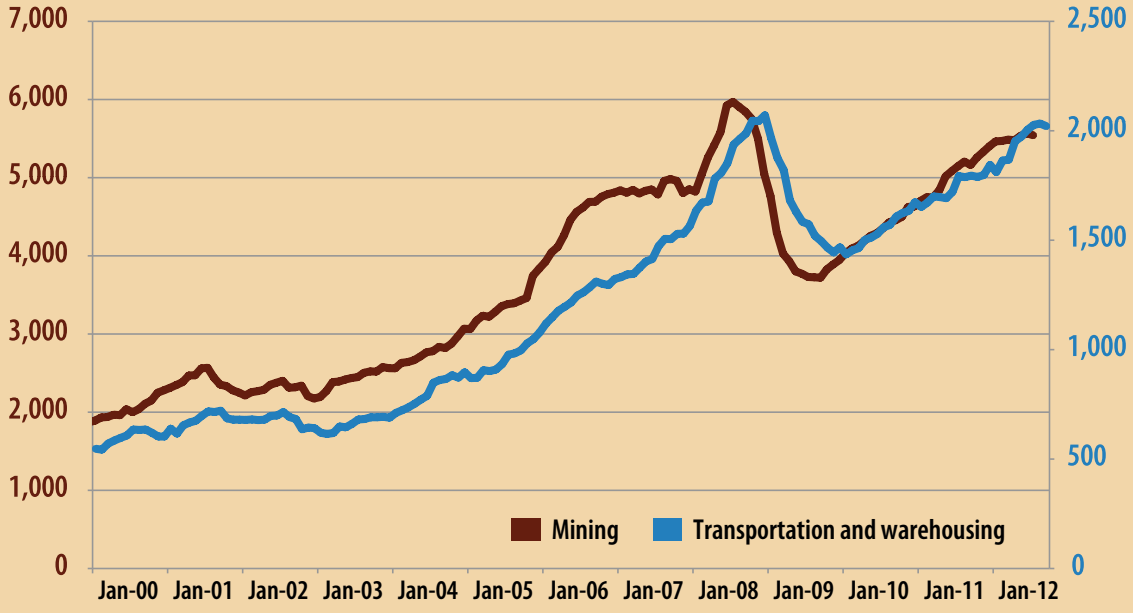
One of the anecdotal concerns that the industry and business leaders from the task force expressed was that many of the heavy-truck drivers were older. This aspect, combined with the growing need for drivers overall, would lead to a shortage of qualified drivers. Data from the U.S. Census Bureau's Local Employment Dynamics (LED) program, in fact, reveals this to be the case. According to this data, 41 percent of all truck transportation employees are 45 years or older as of the second quarter of 2012, the most recent data available (Figure 8). At the state level, this statistic is even higher: 47 percent of those in the truck transportation industry are at least 45 years old.

The truck transportation industry is almost entirely dominated by men. As of the second quarter in 2012, 84 percent of these Uintah Basin truck transportation employees are male. This is congruent with the proportion of males in the industry at a statewide level, where men make up 85 percent of the truck transportation sector.

The occupation of heavy and tractor-trailer truck driving for Eastern Utah pays an annual median wage of $45,180, or $21.72 per hour. These are the highest median wages in the state for this occupation. Aside from the CDL certification, this occupation typically requires short-term on-the-job training, a high school diploma or equivalent, and one to five years of experience.

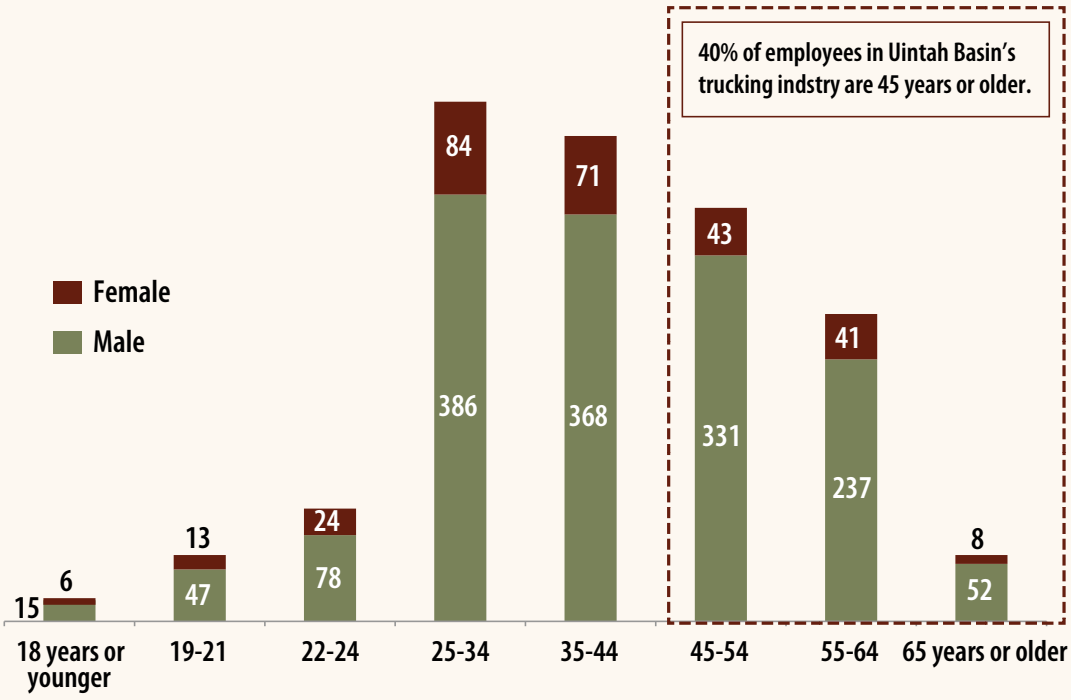
The booming sector of oil and gas relies on those in the trucking industry to transport raw and processed materials. This affects not only the market of local transportation but of interstate transportation also, as drivers are needed for oil companies who are based in more than one state. As long as the level of oil and gas mining continues at an elevated pace, the transportation industry in the Eastern region of Utah should also continue to operate at higher capacities.

Figure 7: Transportation/Warehousing and Mining Employment



Source: Department of Workforce Services

Figure 8: Truck Transportation Employment by Age and Gender



Source: Department of Workforce Services

Workforce Services
Workforce Research and Analysis (WRA) Division
140 E. 300 S. • Salt Lake City, UT 84111
Equal Opportunity Employer/Programs

localinsights

Executive Director: Jon Pierpont

Director, WRA: Rick Little

Supervising Economist: Carrie Mayne

Chief Editor: Kathy Hopkinson

Designer: Pat Swenson and Annette Ward

Regional Economist: Eric Martinson
emartinson@utah.gov • 801-526-9404

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Initial Claims as an Economic Indicator

BY MELAUNI JENSEN, LMI ANALYST

The Unemployment Insurance Benefits program in Utah is administered by the Department of Workforce Services. This program was started to help safeguard the economy against short-term losses by aiding individuals who have lost their income because of a layoff. Through this program, DWS collects contributions, determines eligibility, takes claims and pays benefits to unemployed workers. When individuals find themselves out of work through no fault of their own or have their hours reduced, they can file what is called an initial claim, allowing them to become eligible for a minimum of 10 weeks and a maximum of 26 weeks of regular benefits. Not all claimants will use the entire time, as they may be able to find a new position with another industry or employer. To be eligible for these benefits, unemployed workers must meet certain criteria as defined by DWS, and an individual will not be eligible if they voluntarily leave their job. If a claimant has been deemed eligible, they will receive an amount based on their earnings over a recent 52-week period. Utah continues to update its UI program, making it easier for both claimants and employers, giving them the option to file and respond online.

When businesses lay off workers it causes the number of initial claims to rise — an indicator of a weakening economy. As the economy recovers and layoffs drop, so do initial claims. Mass layoffs, or establishments having 50 or more initial claims in a five-week period, are usually a contributing factor to a drastic increase, and the Unemployment Insurance program helps identify those layoffs to ensure that workers qualify for UI benefits.

Analysts measure the level of initial claims to provide a leading indicator of labor market conditions in an attempt to gain insightful information about the economy. Initial claims data is released on a weekly basis. Some have questioned whether measuring initial claims in this way is a good indicator. Initial claims can increase when individuals are laid off or when the percentage of individuals who are eligible for, claim and receive UI benefits rises. This can make it more difficult to compare these levels over extended periods of time. Over the latest recession, the UI program expanded and allowed more workers to be eligible for benefits, making analysts take a harder look at those indicators.

In the beginning of 2007, Utah's economy was still thriving with just over 6,300 initial claims for January; but by the start of 2009 that number had risen to over 20,000 claimants. The labor force obviously suffers during recessions, and as we moved further into this latest, roughly 80,000 jobs were taken from Utah's workers, and UI claims continued to rise. In the past three years, initial claims have made a slow but steady descent with a 9,343 monthly average in 2010, just under 8,000 in 2011 and this most recent year behind us with barely over 7,000. In Utah, most economists and analysts agree that these and other indicators will continue to show this downward trend.